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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/644,149	08/20/2003	Thomas A. Greenwood	95-247C 6491		
7590 02/04/2005			EXAM	INER	
John C. Hammar			PATEL, RAMESH B		
The Boeing Co		ART UNIT	PAPER NUMBER		
PO Box 3707, Seattle, WA			FAFER NUMBER		
Journe, Tri	JOIL 1 2207		2121		
		DATE MAILED: 02/04/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application	Application No. Applicant(s)					
		10/644,149	}	GREENWOOD ET AL.				
		Examiner		Art Unit				
		Ramesh B.		2121				
The MAI Period for Reply	LING DATE of this communication	n appears on the	cover sheet with the d	correspondence ad	ddress			
THE MAILING  - Extensions of time after SIX (6) MONT  - If the period for rep  - If NO period for rep  - Failure to reply with Any reply received	D STATUTORY PERIOD FOR RED DATE OF THIS COMMUNICATION may be available under the provisions of 37 CF HS from the mailing date of this communication by specified above is less than thirty (30) days, by is specified above, the maximum statutory point the set or extended period for reply will, by so by the Office later than three months after the radjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no ever n. a reply within the statut eriod will apply and will statute, cause the applic	nt, however, may a reply be tin ory minimum of thirty (30) day expire SIX (6) MONTHS from cation to become ABANDONE	nely filed  ys will be considered time the mailing date of this of ED (35 U.S.C. § 133).				
Status								
1)⊠ Responsi	ve to communication(s) filed on 2	20 August 2003.						
2a) ☐ This action	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disp sition of Cla	ims							
4a) Of the 5) ☐ Claim(s) 6) ☑ Claim(s) 7) ☐ Claim(s)	1-9 is/are pending in the application above claim(s) is/are with is/are allowed.  1-9 is/are rejected is/are objected to are subject to restriction and	ndrawn from con						
Application Paper	s							
9) 🖾 The speci	fication is objected to by the Exar	miner.						
10)⊠ The drawi	$\boxtimes$ The drawing(s) filed on <u>20 August 2003</u> is/are: a) $\boxtimes$ accepted or b) $\square$ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	ent drawing sheet(s) including the co or declaration is objected to by th				•			
Priority under 35 l	J.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
Attachment(s)								
1) Notice of Referen			4) Interview Summary					
	erson's Patent Drawing Review (PTO-948 sure Statement(s) (PTO-1449 or PTO/SE Date <u>9/15/2003</u> .	B/08)	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:		O-152)			

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#### **DETAILED ACTION**

1. Claims 1-9 are presented for examination.

2. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

#### **Priority**

3. The examiner has made official notice that the data provided for application(s) domestic priority not consistent with PTO records such as on page 2 of the specification and on "Transmittal of New Application" page 1. "Application 08/869,857, filed June 3, 1997" should be "Application 08/867,857, filed June 6, 1997". An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence(s) of the specification or in an application

data sheet by identifying the prior application by application number (37 CFR 1.78(a)(2) and (a)(5)). If the prior application is a non-provisional application, the specific reference must also include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

The applicant is suggested to review this matter and make appropriate correction as required.

## **Information Disclosure Statement**

4. The information disclosure statement (IDS) submitted on 9/15/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### Specification

5. The disclosure is objected to because of the following informalities: the data provided for application(s) domestic priority not consistent with PTO records such as on page 2 of the specification and on "Transmittal of New Application" page 1.

"Application 08/869,857, filed June 3, 1997" should be "Application 08/867,857, filed June 6, 1997".

Applicant is suggested to review matter in the submitted original disclosure and make appropriate correction as required.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kashiwagi et al. (US Patent 5,129,044).

As to claims 1, 5 and 9, Kashiwagi teaches the invention including information storage media and the method for improving the accuracy of a machime having a machine controller for guiding movement of a machine tool, comprising: computer software storage media having computer-readable information recorded to provide trickle feed, delta correction commands in machine media from an external software controller to a machine controller to correct for a position error determined by a comparison of the true position of a machine tool under the control of the machine controller and the position that the machine controller locates the machine tool following machine media positioning commands derived from an engineering specification of a part is taught as the position/force controlling apparatus for working machine having a computing section and memory section for storing, teaching data and playing back stored and computed data during play-back operation and delivering the same to a position command setting section through interpolation (see, abstract and figures 12-15,

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20 and 23 and col. 22, lines 20-40), the delta correction commands moving the machine tool if the position error exceeds a predetermined offset threshold, wherein the software controller records the correction commands for later analysis of machine wear and uses a standard deviation protocol to determine the rest position when the machine tool tops following movement (see, abstract and figures 6-8 and col. 6, lines 20-54 and col. 18, lines 46-68).

As to claim 2, Kashiwagi teaches the information storage media further comprising a standard deviation control protocol for determining the rest position of the end effector (see, abstract and figures 7-9 and col. 3, lines 28-65).

As to claims 3-4 and 6, Kashiwagi teaches the information storage media further comprising a first code portion that uses least squares fit algorithms for providing a first order, linear approximation of the position error (see, figures 1 and 7-10 and col. 3, lines 28-65).

As to claims 7-8, Kashiwagi teaches a machine tool system for improving positioning accuracy of a machine tool, comprising: a machine having a machine tool and a machine controller and a software controller connected to the machine controller for executing the information storage media of claim 1 (see, abstract and figures 12-15, 20 and 23 and col. 22, lines 20-40 and col. 29, line 54 to col. 30, line 2).

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh B. Patel whose telephone number is 571-272-3688. The examiner can normally be reached on M-Th; 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramesh B. Patel Primary Examiner Page 6

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